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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,955	12/09/2003	Oliver Keren Ban	AUS920030610US1	3699
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IBM CORPORATION PO BOX 12195 DEPT YXSA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709			EXAMINER PATEL, HEMANT SHANTILAL	
			ART UNIT 2614	PAPER NUMBER
			MAIL DATE 12/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/730,955	Applicant(s) BAN, OLIVER KEREN	
	Examiner Hemant Patel	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-18, 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims recite computer program. The computer program as an algorithm is a non-statutory matter. Furthermore, the claim recites a program comprising means for generating, receiving stream of data packets and generating background noise. It is not clear how a logical program can comprise physical means.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 7-9, 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Mekuria (US Patent No. 6,708,147 B2).

Regarding claim 1, Mekuria teaches of a telecommunications system (Figs. 1, 3) providing communication channels for the transmission of packets of audio data between system stations, a system for minimizing the effect of required generated background noise on said transmission channel utilization comprising:

means for forming a transmission stream of sequential digital audio data packets (Figs. 1, 3, items 18, 22, 24);

means for associating with each audio packet, a data code representation of the payload data packet enabling the generation of said background noise (Fig. 3, items 18, 22, 24; col. 5, ll. 7-13, combined data-voice packet);

means at said system receiving station, responsive to each of said data representations for forming the represented payload data packet enabling said generation of background noise (Fig. 3, items 26, 40, 46, using look-up table and converting noise code to actual noise parameters A_p);

means at said receiving station for interspersing said formed payload packets enabling background noise generation between said associated audio data packets (Fig. 3, items 40, 48; col. 5, ll. 1-13; generating noise according to amplitude parameters A_p and these parameters are for respective data code received with each combined data-voice speech packet); and

background noise generating means, at said receiving station, responsive to said enabling payload packets for generating said background noise between said audio data packets (Fig. 3, items 40, 48; col. 5, ll. 1-7; generating noise according to amplitude parameters A_p) (col. 3, ll. 20-col. 5, ll. 27).

Regarding claim 2, Mekuria teaches that these packets are voice data packets (col. 3, ll. 20-col. 5, ll. 27).

Regarding claim 3, Mekuria teaches that background noise is white noise (col. 5, ll. 1-13).

Regarding claim 7, it recites a method performing functions substantially similar to the method performed by the system as claimed in claim 1. Refer to rejection for claim 1.

Regarding claim 8, refer to rejections for claim 7 and claim 2.

Regarding claim 9, refer to rejections for claim 8 and claim 3.

Regarding claim 13, it recites a computer program performing functions in a system substantially similar to the system as claimed in claim 1. Refer to rejection for claim 1.

Regarding claim 14, refer to rejections for claim 13 and claim 2.

Regarding claim 15, refer to rejections for claim 14 and claim 3.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-6, 10-12, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mekuria as applied to claim 3 above, and further in view of Hong (US Patent Application Publication No. 2004/0258132 A1).

Regarding claim 4, Mekuria does not teach about Additive Gaussian White Noise.

However, in the same field of communication, Hong teaches of generating and adding white Gaussian noise to channel signal in digital domain (Paragraphs 0002-0023).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Mekuria to use additive Gaussian white noise with channel signal (voice packets) as taught by Hong in order to provide the system and method "for generating and AWGN in digital domain, wherein the user can adjust a signal to noise ratio easily and a frequency characteristic of the generated white noise is flat at an equal symbol rate as that of the channel signal" (Hong, Paragraph 0005).

Regarding claim 5, Mekuria teaches that data code represents duration and amplitude of the AGWN packet (col. 4, ll. 39-col. 5, ll. 13; each amplitude parameter packet sent every .375 secs.; also amplitude parameter data code sent as part of combined data-voice packet).

Regarding claim 6, Mekuria teaches that data code representing payload for generating background noise is part of voice data packet (col. 5, ll. 1-13; amplitude parameter data code sent as part of combined data-voice packet).

Regarding claim 10, refer to rejections for claim 9 and claim 4.

Regarding claim 11, refer to rejections for claim 10 and claim 5.

Regarding claim 12, refer to rejections for claim 11 and claim 6.

Regarding claim 16, refer to rejections for claim 15 and claim 4.

Regarding claim 17, refer to rejections for claim 16 and claim 5.

Regarding claim 18, refer to rejections for claim 17 and claim 6.

6. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mekuria and Hong as applied to claims 4, 10, 16 above, and further in view of Nayak (US Patent Application Publication No. 2003/0078767 A1).

Regarding claim 19, Mekuria and Hong do not teach about substituting Internet page (data) packets in place of AGWN packets between voice packets.

However, in the same field of communication, Nayak teaches of system and method for voice and data transmission in VoIP, wherein the code is inserted for silence and the bandwidth that would have been allocated for voice to represent silence (similar to background noise generation packets used to replace silence) is recovered and used for other data (Paragraph 0010).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Mekuria and Hong to recover the bandwidth used for voice packets representing silence and use it for other useful data as taught by Nayak in order to remove "the necessity of packetizing the silence portion of a phone conversation (e.g., when no one is talking)" and "optimize bit-rates in simultaneously transmitting voice and data information" (Nayak, Paragraph 0010).

Regarding claim 20, refer to rejections for claim 19 and claim 10.

Regarding claim 21, refer to rejections for claim 19 and claim 16.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,912,923	Hellwig
US Patent No. 5,953,666	Lehtimaki
US Patent No. 6,249,180	Maalej

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemant Patel whose telephone number is 571-272-8620. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Hemant Patel
Examiner
Art Unit 2614

HSP

HSP

[Signature]
FAN TSUNG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600